IN THE CLAIMS

Please amend the claims as follows:

Claim 1. (Currently Amended) A screw with a heat exchange function comprising:

a screw element having an end portion which is rotatably supported by a bearing;

a heat exchange medium chamber located at a center section in the radial direction of said screw element, said heat exchange medium chamber running along the lengthwise direction of said screw element; [[and]]

a heat exchange medium supply pipe supplying a heat exchange medium, said heat exchange medium supply pipe having a first portion provided entirely at one side of said bearing in the lengthwise direction of said screw element and extending ~~being stored~~ in said heat exchange medium chamber, said heat exchange medium supply pipe further including a second portion provided entirely at another side of said bearing in the lengthwise direction of said screw element and extending out of said screw element, said another side being opposite said one side in the lengthwise direction of said screw element, wherein said first portion of said heat exchange medium supply pipe comprises split pipes and is split into two or more sections in the lengthwise direction of said screw element, and

pipe connecting means for bendably connecting ~~connects~~ said split pipes with each other.

Claim 2. (Currently Amended) [[The]] A screw ~~according to claim 1~~ with a heat exchange function comprising:

a heat exchange medium chamber located at a center section in the radial direction of said screw, said heat exchange medium chamber running along the lengthwise direction of said screw; and

a heat exchange medium supply pipe supplying a heat exchange medium, said heat exchange medium supply pipe being stored in said heat exchange medium chamber,

wherein said heat exchange medium supply pipe comprises split pipes and is split into two or more sections in the lengthwise direction, and pipe connecting means bendably connects said split pipes with each other, wherein a ring protrusion is provided on the end side of said split pipe, a groove into which said ring protrusion is fitted is provided on an inner surface of cylindrical section of said pipe connecting means,

and wherein the inner diameter of said cylindrical section of said pipe connecting means is set larger than the outer diameter of said split pipe, the diameter at the bottom of said groove is set larger than the outer diameter of said ring protrusion, and the width of said groove is set larger than the width of said ring protrusion, so that said split pipe can move in the lengthwise direction and the radial direction relative to the pipe connecting means by predetermined quantities.

Claim 3. (Original) The screw according to claim 1, wherein said pipe connecting means comprises a bendable bellows.

Claim 4. (Original) A mixer comprising:

a barrel; and

the screw according to claim 1, said screw being rotatably fit in said barrel, wherein material to be kneaded is supplied to said barrel and is kneaded by said screw.

Claim 5. (Original) An extruder comprising:

a barrel; and

the screw according to claim 1, said screw being rotatably fit in said barrel, wherein material to be mixed and extruded is supplied to said barrel and is mixed and extruded by said screw.